

LEAKAGE INDICATOR

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Abstract of JP2002040079

PROBLEM TO BE SOLVED: To solve the problems of a grasping type zero phase converter for detecting the voltage of a power line cable in an activated state in no contact from above a coating, or the inconvenience of independent measurement of current and voltage and the phase error by the change of close position of a voltage detecting conductor because of voltage measurement through an electrostatic capacity. **SOLUTION:** This leakage indicator first has an integrated structure capable of simultaneously detecting both current and voltage only grasping the cable by being provided with a converter structure in which the voltage detecting conductor P is formed of a semi-cylindrical thin conductive plate and stuck to one side of the inner surface of the converter ZCT.

Secondary, the electrostatic capacity between the voltage detecting conductor and power lines 1 and 2 is made to the direct input impedance of a reversing amplifier, and a 90 deg.-delay phase device by a mirror integrator is provided since the output voltage of the reversing amplifier is thus advanced 90 deg.. Further, the mirror integrator is negatively returned with an equivalent inductance by a capacitor and a resistor and highly stabilized since it is extremely excellent in phase precision but influenced by a DC drift.

